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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,557	04/28/2006	Shinsuke Matsumoto	1033622-000022	8186

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EXAMINER	
WINKLER, MELISSA A	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
05/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/577,557	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	MELISSA WINKLER	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-10* is/are rejected.

7)☒ Claim(s) *1* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/3/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: Claim 1 sets forth the foam is produced with "0.99.5 parts by weight polyol (C)." It is presumed the claim intended to set forth the foam is produced with 0 to 99.5 parts by weight polyol (C), as would appear most consistent with the originally filed claims. However, appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5, and 8 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/07521 to Parfondry et al.

Regarding Claims 1 and 3. Parfondry et al. teach a flexible polyurethane obtained by the reaction of a polyisocyanate and polyol composition. The polyol

composition contains a polyoxypropylene polyol (Polyol b3) prepared with an amine initiator, such as 1-(2-aminoethyl)piperazine, and possessing a hydroxyl (OH) value of greater than 400 to 600 (Page 8, Lines 9 – 28; Page 10, Line 33 – Page 11, Line 10).

While Parfondry et al. are silent regarding the amine value of Polyol b3, Parfondry et al. teach a composition prepared with the claimed ingredients and specifically claimed amine compound. Parfondry et al. further teach the composition is used to prepare a flexible polyurethane foam. It is thus the Office's position that it would be reasonably expected that the amine-initiated polyether polyol taught by Parfondry et al. would have an amine value in the claimed range of 400 to 600 mg KOH/g.

Parfondry et al. teach the polyol composition comprises 20 – 70% weight Polyol b1, 5 - 50% weight Polyol b2, and 5 - 50% weight Polyol b3 described above. Polyols b1 and b2 are polyether polyols with functionalities between 2 and 6 (Page 3, Lines 1 – 17). Polyols b1 and b2 used in the examples have hydroxyl numbers of 42 and 28, respectively (Page 13, Lines 29 – 34).

Parfondry et al. therefore do not teach Polyol b3 comprises 0.5 – 3 parts by weight of the polyol composition, as claimed. Parfondry et al. do, however, teach polymer-modified/polymer-dispersed polyols may further be added to the polyol composition (Page 9, Lines 1 - 11), though Parfondry et al. are silent regarding the

amount that may be added. It is the Office's position that the presence of a polymer-modified polyol in the polyol composition would be reasonably expected to lower the proportion of Polyol b3 that comprises the polyol composition. Furthermore, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 220 F.2d 454, 105, 105 USPQ 233 (CCPA 1955) (MPEP 2144.05) At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of Polyol b3 to obtain a polyurethane foam product with sufficient flexibility for its intended use. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 617 F.2d 272, 205, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05)

Regarding Claim 5. Parfondry et al. teach the foam of Claim 3 may be used in the automotive industry as seating (Page 12, Lines 21 – 25).

Regarding Claim 8. Parfondry et al. teach the foam of Claim 5. Parfondry et al. teach the presence of Polyol b3 prevents the release of amine-containing compounds from the foam (Column 8, Lines 9 – 16) but are silent regarding a specific amount of volatile amine components in the foam. Consequently, the Office recognizes that all of the claimed effects or physical properties are not positively stated by the reference(s).

However, the reference(s) teaches all of the claimed ingredient(s). Therefore, the claimed effects and physical properties, i.e. an amine-initiated polyether polyol with an amine value of 400 to 600 mg KOH/g, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with *only* the claimed ingredients.

Regarding Claim 9. Parfondry et al. teach the foam of Claim 3 has very good damping properties (Column 12, Lines 26 – 27).

Regarding Claim 10. Parfondry et al. teach the foam of Claim 3. Parfondry et al. teach the presence of Polyol b3 prevents the release of amine-containing compounds from the foam (Column 8, Lines 9 – 16) but are silent regarding a specific amount of volatile amine components in the foam. Consequently, the Office recognizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredient(s). Therefore, the claimed effects and physical properties, i.e. an amine-initiated polyether polyol with an amine value of 400 to 600 mg KOH/g, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be

the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with *only* the claimed ingredients.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/07521 to Parfondry et al., as applied to Claims 1, 3, and 5 above, and further in view of US 6,087,410 to Falke et al.

Regarding Claims 6 and 7. Parfondry et al. teach the seating of Claim 5 but do not teach its hardness and wet heat compression set ratio. Consequently, the Office recognizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredient(s). Therefore, the claimed effects and physical properties - i.e. a foam seat with a 25% LID hardness between 150 to 300 or 50 to 200 N/314 cm^2 and a wet heat compression set ratio of not greater than 20% - would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that

there is no teaching as to how to obtain the claimed properties with *only* the claimed ingredients.

Parfondry et al. also do not teach the density of the foam prepared according to Claim 5. However, Falke et al. also teach a polyurethane foam prepared with a density in the range preferably from 25 to 50 kg/m^3 (Column 10, Lines 19 - 22). Parfondry et al. and Falke et al. are analogous art as they are from the same field of endeavor, namely flexible polyurethane foams. At the time of invention, it would have been obvious to a person of ordinary skill in the art to add a blowing agent to the foam-forming composition taught by Parfondry et al. in an amount sufficient to prepare a foam with a density in the range taught by Falke et al. The motivation would have been that the density taught by Falke et al. would be a suitable density for automobile seat applications (Falke et al.: Column 10, Lines 19 – 25), an intended use for the foam taught by Parfondry et al. (Parfondry et al.: Page 12, Lines 21 – 25).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/07521 to Parfondry et al.

Regarding Claim 4. Parfondry et al. teach a polyol composition comprising 20 – 70% weight Polyol b1, 5 - 50% weight Polyol b2, and 5 - 50% weight Polyol b3. Polyols b1 and b2 are polyether polyols with functionalities between 2 and 6 (Page 3, Lines 1 –

17). Polyols b1 and b2 used in the examples have hydroxyl numbers of 42 and 28, respectively (Page 13, Lines 29 – 34). Polyol b3 is a polyoxypropylene polyol prepared with an amine initiator, such as 1-(2-aminoethyl)piperazine, and possessing a hydroxyl (OH) value of greater than 400 to 600 (Page 8, Lines 9 – 28; Page 10, Line 33 – Page 11, Line 10).

While Parfondry et al. are silent regarding the amine value of Polyol b3, Parfondry et al. teach a composition prepared with the claimed ingredients and specifically claimed amine compound. Parfondry et al. further teach the composition is used to prepare a flexible polyurethane foam. It is thus the Office's position that it could be reasonably expected that the amine-initiated polyether polyol taught by Parfondry et al. would have an amine value in the claimed range of 400 to 600 mg KOH/g. Parfondry et al. do not teach Polyol b3 comprises 0.5 – 3 parts by weight of the polyol component, as claimed. Parfondry et al. do, however, teach polymer-modified/polymer-dispersed polyols may further be added to the polyol composition (Page 9, Lines 1 - 11), though Parfondry et al. are silent regarding the amount that may be added. It is then the examiner's position that the presence of a polymer-modified polyol in the polyol composition would be reasonably expected to lower the proportion of Polyol b3 that comprises the polyol composition. Furthermore, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to

render applicants' claims patentable in the absence of unexpected results. *In re Aller,* 220 F.2d 454, 105, 105 USPQ 233 (CCPA 1955) (MPEP 2144.05) At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of Polyol b3 to obtain a polyurethane foam product with sufficient flexibility for its intended use. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney,* 617 F.2d 272, 205, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05)

Response to Arguments

Applicant's arguments filed January 21, 2009 have been fully considered but they are not persuasive because:

A) Applicant argues that only one of the amine compounds disclosed on page 8 of Parfondry et al. meets the definition of formula (I) or formula (II) set forth in the instant claims. However, when a species is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex part A,* 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) (MPEP 2131)

B) Applicant argues that Parfondry et al. teaches away from the claimed invention by setting forth Polyol b3 comprises 5 - 50% by weight of the polyol composition.

Parfondry et al. teach a polyol composition comprising 20 – 70% weight Polyol b1, 5 - 50% weight Polyol b2, and 5 - 50% weight Polyol b3. Applicant has noted that weight of Polyol b3 taught by Parfondry et al., corresponding to applicant's polyol (A), is based upon the combined weights of Polyols b1, b2, and b3. Applicant has further argued that the Office action relied upon Polyols b1 and b2 to teach applicant's polyols (B) and/or (C). While polyols b1 and b2 appear to correspond only to applicant's polyol (B) defined in the instant claims, applicant's argument that the presence of an additional polyol outside the definitions of polyols b1, b2, and b3 would not affect the amount of Polyol b3 relative to Polyols b1 and Polyol b2 is persuasive.

Nonetheless, the Office maintains the position that it would have been obvious to optimize the amount of Polyol b3 taught by Parfondry et al. to obtain a polyurethane foam product with sufficient flexibility for its intended use in light of *In re Aller*, 220 F.2d 454, 105, 105 USPQ 233 (CCPA 1955) (MPEP 2144.05)

A prima facie case of obviousness may be rebutted where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 617 F.2d 272, 205, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05)

However, it has been held that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed Cir. 1983). Applicant has only provided one example, Comparative Example 7, as evidence that an amount of polyol (D) greater than that recited in the claims of record has a substantial effect on all results. There is consequently insufficient evidence to conclude that any amount of polyol (D) greater than 3 parts by weight, as instantly claimed, would have a substantial effect on all results as asserted by applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date

of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA WINKLER whose telephone number is (571)270-3305. The examiner can normally be reached on Monday - Friday 7:30AM - 5PM E.S.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/ MW
Supervisory Patent Examiner, Art Unit 1796 April 28, 2009